

Memorandum

Date: SEP 30 2011

To: Joe Grindstaff
Executive Officer
Delta Stewardship Council
980 Ninth Street, Suite 1500
Sacramento, California 95814

From: Dale K. Hoffman-Floerke
Deputy Director
Department of Water Resources

Subject: Staff Comments on Fifth Staff Draft Delta Plan dated August 2, 2011

This memorandum transmits the Department of Water Resources' (Department) staff comments of the Fifth Staff Draft of the Delta Plan released by the Delta Stewardship Council (DSC) on August 2, 2011.

This fifth staff draft of the Delta Plan (Plan) is significantly longer than previous drafts and each chapter provides a more detailed description of many important issues in the Delta. The Department's comments on the fifth staff draft are provided in the attached document and are organized by chapter, section, page number and line number. Staff has provided proposed language changes to the Plan where appropriate. The Department will also provide comments on the subsequent versions of the public drafts of the Plan as they become available.

Comments on the Environmental Impact Report (EIR) will be provided under separate cover after release of the CEQA document.

As in the past, Department staff members will continue to be available to respond to questions regarding Department reports, analyses and the comments provided in the attachment to this letter.

If you have any questions regarding the Department's comments, please contact me or Robert Yeadon the Delta Regional Coordinator at (916) 651-7012.



Dale K. Hoffman-Floerke
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Attachment

cc: (See attached list.)

Joe Grindstaff
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Page 2

cc: Kamyar Guivetchi
Art Hinojosa
Kathy Kelly
Cathy Crothers
Katherine Spanos

Staff Comments on Fifth Staff Draft Delta Plan
Dated August 2, 2011
Department of Water Resources

The following review is provided by the Department of Water Resources (Department) staff on the Fifth Staff Draft Delta Plan released to the public on August 2, 2011, by the Delta Stewardship Council (DSC). This fifth staff draft of the Delta Plan is significantly longer than previous drafts and provides more detailed discussion in each chapter. Almost all of the figures and tables referred to in the text are also provided in this fifth staff draft. The following comments are organized by chapter, page and line number to facilitate the DSC's review and understanding of these comments. As in the past, Department staff members will continue to be available to respond to questions regarding Department reports, analyses, and comments provided in this attachment. The Department plans to provide comments on the CEQA document for the Delta Plan under separate cover.

General Comments:

The fifth staff draft has asked the Department to produce certain items or perform certain tasks in the recommendations and policies in this version of the Delta Plan. Almost fifty of the seventy three recommendations and policies will require some action on the part of the Department. The DSC may not be fully aware how difficult some of these recommendations and policies are to achieve. As a result, false expectations may be created about the Department's ability to carry them out. Although the Department believes many of the recommendations are worthwhile, most of them will require significant staffing and funding, which may not currently exist. We believe that is important that the Plan take into account that the Department's ability to implement the recommendations may be constrained by staffing and funding limitations.

Program managers in the Department were requested to provide a preliminary estimate of the financial impacts to their programs associated with the recommendations and policies provided in this Draft Plan. The amount of staff time and money for outside consultants were estimated based on certain assumptions to bracket the estimated costs. It is roughly estimated that over the next five years, between 150 to 300 personnel years (PYs) would be required to complete these actions. Costs could range between \$75 million to \$200 million. Moreover, it would be very difficult or impossible to meet some of the proposed timelines in the Draft Plan since it would take at least two years to complete the Budget Change Proposal (BCP) process before work could even start. Specific impacts to some departmental programs are provided in the following comments.

Delta Vision

Consistent with California Water Code (CWC) 85300(a) and 85067, the Delta Plan should consider each of the strategies and actions identified in the Strategic Plan as defined in CWC 85067 as the Delta Vision Strategic Plan and the Delta Vision Implementation Report. For example, the Strategic Plan recommends the construction of a demonstration fish protection screen at Clifton Court Forebay and implementation of a Middle River Corridor Two Barrier pilot project, but the draft Delta Plan does not refer to either of these projects. The Strategic Plan recommends research and development for agricultural sustainability in the Delta but the draft Delta Plan does not include recommendations for funding this research. For consistency, these should be addressed in the Delta Plan.

Water Supply

The term 'water supply' should be used consistently throughout the draft Delta Plan. For example, on page 78, the draft Delta Plan states that State and Central Valley Water Projects export an average of 6 MAF annually and that this represents 15% of the State water supply. This is inconsistent with page 23, lines 42 - 43, which states that California's average annual water supply is 83 MAF (of which 6 MAF would be 7%). Since this is such an important part of the Plan, care should be taken to make sure that the term water supply is used consistently.

Levees

The levee miles in the Delta also should be used consistently throughout the draft Delta Plan. For example, page 108, line 31 of the draft Delta Plan states there are approximately 1,115 miles of levees in the Delta and Suisun Marsh. On page 15, lines 10-12, and on page 161, line 10, the Delta refers to "more than 1,335 miles of levees" in the Delta and Suisun Marsh. To be supportable, these numbers need a clear definition for 'levee' associated with it. It could be a bit misleading to imply that the levee miles in the Delta and Suisun Marsh can be stated clearly with an accuracy of plus or minus five miles without including a clear discussion of how the word 'levee' is being defined.

There are three main types of levees in the Delta and Suisun Marsh: project, non-project, and unattributed levees. There are roughly 1,000 miles of project and non-project levees in the Delta and Suisun Marsh. These levees include some that are unmaintained along the perimeter of permanently flooded islands and therefore may not technically function as levees in the traditional sense. Additionally, there are hundreds of miles of unattributed levees in the Delta, as well as hundreds of miles of unattributed levees in the Suisun Marsh. Unattributed levees in the Delta are often dry-land levees,

such as those separating Reclamation Districts and levees along wastewater treatment plant ponds. Unattributed levees in the Suisun Marsh are often along waterways. Depending upon which types of levees are being counted, different values may be derived for levee mileage in the Delta. For discussion purposes, the Department recommends that levee miles be approximated.

Preface

Shifting Focus from Treating Symptoms to Treating Problems

Page 5, lines 11 - 13

The text states that “Despite the cheerful optimism of past governance efforts to assert that when it comes to matter of the Delta “we can all get better together,” the DSC has reached another conclusion. True effort to achieve the coequal goals will in fact bring tradeoffs that will be neither popular nor clear-cut.” This paragraph appears counter to the coequal goals. Although tradeoffs may be necessary, the Department believes that it is possible to provide a more reliable water supply for California and protect, restore, and enhance the Delta ecosystem. These coequal goals can be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place. The concept of winners and losers may not necessarily be so clear cut.

Improve Water Supply Reliability and Reduce Reliance on the Delta

Page 5, line 36 and line 38

To be more concise, the phrase ‘rely on Delta exports’ should be replaced by ‘rely on water exports from the Delta.’ The term ‘water efficiency’ should be changed to ‘water use efficiency.’ These terms should be used consistently throughout the document.

Page 6, lines 1 - 3

Consider adding ‘the conjunctive use of ground and surface water supplies’ to this list of methods to reduce reliance on water exported from the Delta.

Page 6, lines 9 - 10

Consider changing the text, “Suppliers who rely upon water from the Delta ...” to “Suppliers who rely upon water exported from the Delta, divert water in the Delta, or divert water from rivers flowing into the Delta.” All three types of water suppliers, and

those who purchase their water, place stresses upon the Delta. As the document states, all of these suppliers need to “use available resources and tools” to help ensure the efficient use of their water supplies.

Reduce Risk

Page 6, lines 28 - 31

To reduce flood risks, the Plan should state that there should be no new housing developments in the primary zone of the Delta.

Page 6, line 34

The Plan should be clear that the term ‘urban areas’ include not only what’s already been developed, but what’s in cities’ spheres of influence and County urban limit lines. Once urban areas in the Secondary Zone achieve a 200-year level of protection, which is what the Central Valley Flood Protection Plan is striving for, and the economy improves, we can expect that spheres of influence would, in fact, undergo new development in accordance with existing plans. This is particularly true for Tracy, Lathrop (Stewart Tract), and Stockton.

Page 7, lines 10 – 11

The text states that: “It (the Delta Plan) is intended to serve as California’s guiding policy document for the next 88 years, with frequent updates.” In light of this statement, the Plan needs to include more specificity regarding the cost of implementing the actions and policies within. In addition, since this Plan would span 88 years, it needs to establish a sustainable and irrevocable funding source(s) for which to fully pay for the implementation of all the measures needed to be performed to make the Plan work as intended.

Currently, the Plan presents a “Finance Plan Framework for Funding” in Chapter 9, that attempts to address how implementation of the Plan will be funded. Review of this Framework shows a paucity of useful specificity regarding funding that would ensure that mandates of the Plan are achievable. That is to say, that the mandates and recommendations within the plan are currently unfunded and may not be funded for the foreseeable future. The Plan should recognize these limitations and the financial limitations on other participating agencies as discussed above under general comments.

Chapter 1 The Delta Plan

Context for the Delta Plan

Page 15, line 1

The draft Delta Plan states, “Approximately 57 percent of the Delta and Suisun Marsh, over 480,000 acres of agricultural land...” It may be more correct to state, “roughly half a million acres of agricultural land.”

Page 15, lines 4 - 8

It may be more correct to simply state hundreds of miles of electrical transmission lines and not refer to the number of substations. Much of the infrastructure is in upland areas not protected by levees and the accuracy of these numbers is questionable.

Page 15, lines 10 - 12

It may be more correct to state that the levees protect *about* 800,000 acres of land. (Refer to comments regarding Page 161, line 10.)

Page 16, Figure 1-1

Figure 1-1 uses the CALFED boundary for the Delta Watershed Area. The Sacramento-San Joaquin Delta Reform Act of 2009 defines the Delta watershed as the Sacramento River Hydrologic Region and the San Joaquin River Hydrologic Region as described in California Water Plan Bulletin No. 160-05 (CWC 85060.) These boundaries significantly differ from the CALFED boundary. The map should be corrected to accurately reflect the Delta Watershed as defined in CWC 85060. See:

<http://www.waterplan.water.ca.gov/docs/cwpu2005/vol3/v3ch06.pdf>

<http://www.waterplan.water.ca.gov/docs/cwpu2005/vol3/v3ch07.pdf>

The Delta Plan should note that, while the legal definition of the Delta watershed is limited to the two hydrologic regions, the actual amount of area that may drain into the Delta is larger. Parts of the southern Central Valley, including agricultural drainage, may enter the San Joaquin River. Additionally, during extremely heavy runoff, flood flows in the Kings River reach the San Joaquin River as surface outflow through the Fresno Slough (Tulare Lake Basin Plan, page I-1, see:

http://www.swrcb.ca.gov/rwqcb5/water_issues/basin_plans/tlbp.pdf)

Page 18, Figure 1-2

The draft Delta Plan states “for purposes of the Delta Plan, the Delta and the Suisun Marsh are collectively referred to as the ‘Delta’ unless otherwise specified” (page 56, lines 20 - 21.) This is consistent with California Water Code 85058, which defines “Delta” as the Sacramento-San Joaquin Delta and the Suisun Marsh. However, the “legal Delta” is still defined by CWC 12220, and only includes a small eastern portion of the Suisun Marsh. Figure 1-2 should either be modified to show the boundaries of the legal Delta, as defined by CWC 12220, or the legend should be modified to state “Delta” with a footnote stating that CWC 85058 defines “Delta” as both the Sacramento-San Joaquin Delta and the Suisun Marsh.

CALFED

Page 21, lines 15 - 17

This statement declares that the Little Hoover Commission essentially declared CALFED, a failure. This is perhaps a bit of a misrepresentation. This paragraph should credit CALFED for providing the ground work, including the results of the grant program and Science Program that supports our current understanding of the Delta.

The Delta Reform Act and Legislative Water Package of 2009

Page 21, lines 29 - 31

This description of the Conservancy and Delta Stewardship Council needs to better describe how the two entities will work together. Although it clearly describes the role of the Conservancy, the role of the DSC is vague. A brief summary here would be helpful.

Page 22, Table 1-1

The Department is also responsible for managing the Delta Levees Program as legislatively mandated by AB 360 and SB 34. The US Army Corps of Engineers (Corps) role is primarily flood control; however, the Corps is currently preparing a federal Delta Plan in association with the Department. These should be noted in Table 1-1. For clarification, below is an excerpt from the Department’s “Near Term Guidelines” for Delta levees.

“The State, through the Delta Levees Maintenance Subventions Program and Delta Levees Special Flood Control Projects, has invested over \$200 million in flood control and Habitat Projects carried out by Local Agencies in the Delta. Department of Water Resources (“Department”) funding has been dedicated to maintaining and improving the

aging Delta levees. Under California Water Code Section 12314, the Program must not only mitigate the habitat impacts of each Project it funds, but must also ensure that the Program creates a result of a net long term habitat improvement in the Delta. With the passage of Proposition 1E and Proposition 84 in November 2006, the amount of money potentially available for levee projects in the Delta has significantly increased."

http://www.water.ca.gov/floodmgmt/dsmo/bdlb/spp/near_term_guidelines.cfm

Page 23, lines 9 - 13

In the bulleted list, include 'land subsidence,' as it is an extremely important stressor that inhibits the ability to restore tidal marsh for productivity and fish in the western and Central Delta.

Page 29, lines 25 - 31

The reference to DRMS report needs to be corrected. The first link does not exist: DWR (California Department of Water Resources) 2008. Delta Risk Management Strategy. *Risk 25 Analysis Report Final*.

Chapter 2 Science and Adaptive Management for a Changing Delta

Page 36, Sidebar Section on Planning for Sea Level Rise

While the Ocean Protection Council's (OPC) 2010 Resolution on Sea Level Rise has been widely accepted in policy planning and decision making for State agencies, the Delta Plan should also encourage local agencies and other entities to use these guidelines in their planning efforts in the Delta. More consistent planning for sea level rise and other climate change impacts among the various planning documents in the Delta is needed and the DSC has a unique opportunity, through the Delta Plan, to encourage and promote this effort.

Page 37, lines 13 - 41

The description of the Adaptive Management example is well done; however, eventually this will need to be correlated to BDCP's logic chain. The Department is acutely aware of the difficulties associated with actually carrying out Adaptive Management for projects. The Department believes it is best to keep the process as simple and straightforward as possible. The level of effort of the Adaptive Management should be commensurate with the size and complexity of the project.

Page 38, line 1 - 14

The Nine-Step Adaptive Management Framework could extend project timelines and increase the cost significantly. The Adaptive Management Framework should be applied to appropriate projects commensurate with project size and complexity. The Delta Plan should simplify or eliminate the Adaptive Management Framework for simpler covered actions such as levee improvement projects and small habitat enhancement projects. Consider establishing a fast-track or a time limit on the process. (See comments below on Policy GP 1.)

Chapter 3 Governance: Implementation of the Delta Plan

General Comments:

Please clarify whether the Certification of Consistency would be done before, after, or concurrent with the CEQA process. The Department believes that these two processes should be carried out concurrently to promote efficiency. If the Certification of Consistency process is completed subsequent to the CEQA process, this will add significant costs and time to important projects. Please also provide a description of the timelines associated with the appeal of a certification of consistency.

The Department recommends the Delta Plan refer to and include the figures mentioned in CWC 85057.5 7(c), since the definition of a “covered action” in some instances is dependent on whether the work is in the areas shown in these figures: Figure 3.1 of Chapter 3: *Draft Conservation Strategy of the Bay Delta Conservation Plan*, August 3, 2009, and Figures 1 to 5, inclusive, of the latest revision of the *Final Draft Initial Assessment of Dual Delta Water Conveyance Report*.

Covered Actions Must Comply With Delta Plan Policies

Page 54, lines 8 - 9

The draft Delta Plan states, “Routine agricultural practices are unlikely to be considered a covered action unless they have a significant impact on the achievement of the coequal goals or flood risk.” Routine agricultural practices in peat areas contribute to ongoing subsidence in the Delta by exposing peat to oxygen and produce tailwater with elevated constituent concentrations that may negatively impact water quality in the Delta (e.g., nutrients, pesticides, and carbon). Therefore, these practices may have a significant impact on the achievement of the coequal goals and flood risk. The Strategic Plan specifically recommends research and development for agricultural sustainability in the Delta. The Delta Plan should consider including recommendations for this research, since agriculture is known to impact subsidence and water quality.

Facilitation, Coordination, and Integration

Page 56, lines 1 - 4

The Draft Plan should provide a more detailed description on how federal agencies whose actions impact the Delta will be engaged. The US Army Corps of Engineers is working on its own Delta Plan in conjunction with the Department. The Department believes there should be more engagement of the part of the DSC with the development of the Corps' Delta Plan.

What is the Definition of a Covered Action?

Page 57, Footnote 2

This footnote discusses CEQA statutory and categorical exemptions and states that these exemptions are not similarly incorporated by cross-reference in the definition of a covered action. This statement is somewhat unclear. Does this mean that a project that is exempt from CEQA is not necessarily exempt from being a covered action?

Pages 57 and 58, lines 36 - 38 and lines 1 - 5 respectively

This paragraph discusses regulatory actions of State agencies and goes on to state that the regulatory actions are not a covered action yet the underlying action may be a covered action. An example of an Endangered Species Act take permit was provided. Does this mean that the DSC plans to be involved in the Biological Opinion process? The Plan further states that "...even when a covered action is regulated by another agency (or agencies), the action still must be consistent with the Delta Plan." Will the Delta Plan supersede the laws that the other government agencies are charged with enforcing? These sorts of questions need to be addressed in the Plan.

Statutory Exemptions

Page 58, lines 15 - 16

The word 'take' should be inserted between Act and permit.

Administrative Exemptions

Page 58, line 28

This line exempts temporary water transfers of up to one-year duration. Please note that the Department conveys water transfers through State Water Project (SWP)

facilities in the Delta pursuant to Water Code Section 1810. State law requires the Department and any other public entity with unused conveyance capacity to make that unused capacity available for transferring water, subject to fair compensation and meeting certain conditions. Those conditions are specified in Water Code Section 1810(d) and include no injury to other legal water users, and that the transfers do not unreasonably impact the environment or the economy of the county from which the water originated from. Two types of water transfers are conveyed by DWR through SWP facilities in the Delta: 1) temporary transfers, and 2) water transfers from standing agreements of which DWR is a party to.

Temporary transfers of one year duration are not covered actions. Many temporary water transfers re-occur year after year from the same buyers and sellers and in many cases involving the same water rights. These transfers may be interrupted by lack of conveyance capacity in the SWP or favorable water supply conditions that negate the need for the transfer. These transfers, if they need to go before the State Water Resources Control Board (SWRCB) at all, are petitioned pursuant to Water Code Section 1728 on an annual basis as temporary transfers. The SWRCB has accepted these transfers as temporary. Otherwise, these transfers are initiated as part of their pre-1914 status, which are exempt from the permitting process of the SWRCB.

Page 59, Figure 3-2

For clarity, it would be helpful for the reader if the text of CWC 85057.5(b) and the Public Resource Code 21065 could be placed near the covered actions portion of the Delta Plan rather than in the appendix.

Certifications of Consistency

Page 60, lines 4 - 5

The checklist described for Certification of Consistency should be included for review and comment in the Delta Plan.

Policy

G P1 Certifications of Consistency

Pages 60 - 61, lines 42 - 43 and lines 1 - 10 respectively

This policy requires the documentation of use of best available science and an adaptive management plan. This policy would require a significant amount of resources and add greatly to the expense of projects. For example, under the Delta levees program, the requirement to demonstrate use of best available science and an adaptive

management plan for each levee rehabilitation project would increase costs significantly if required. Moreover, each levee rehabilitation project would also be open to the appeal process and could add a minimum of six months to the schedule thereby missing a construction season and increasing flood risk to people and property in the Delta.

The Delta levees program is also legislatively mandated to mitigate for environmental impacts and provide net habitat enhancement associated with levee construction projects. Under this policy, small mitigation and habitat enhancement projects would have to meet the conditions of using best available science and adaptive management. The Department estimates that this would increase costs anywhere between 20 to 100 percent and add at least one year to the process upon an appeal.

This policy should clearly state that the level of effort to demonstrate the use of best available science and associated adaptive management should be commensurate with the scale of the project. The DSC needs to clearly describe the procedure upon appeal and describe how the Independent Science Board or other DSC scientists would become involved.

Amending the Delta Plan

Page 61, lines 18 - 19

The Delta Plan should describe the procedures necessary to have a program or project considered for incorporation into future drafts of the Delta Plan. For example, the Department's Delta Special Flood Control Projects Program (Special Projects) could be incorporated into the Delta Plan since it involves many covered actions of a similar nature. This, in turn, could streamline the consistency process for this program. However, the Department is concerned that the DSC will request review of each individual project on an annual basis. This would negate the benefits of incorporating the Special Projects Program into the Delta Plan.

Chapter 4 A More Reliable Water Supply for California

Page 68, Water Supply Reliability Insert

In the fourth, sixth, and eighth (last) paragraphs several references are made to "region" or "regions." The Plan needs to better define what region(s) are being discussed as there are many designation of region(s), such as the California Water Plan hydrologic regions and the Integrated Regional Water Management (IRWM) Regional Water Management Group regions, along with others.

The California Water Picture

Page 69, lines 32 - 33

The Delta Plan should define how the word 'precipitation' is being used in this sentence. As used in this sentence, precipitation includes renewable groundwater resources, and inflow from other states, even though these sources are not direct in-state precipitation. The only supplies which are not considered precipitation are the 3 million acre-feet (MAF) of annual groundwater overdraft and ocean desalination (minor). The accuracy of this statement also depends on the definition of 'water supply' as discussed previously.

The California Water Picture

Page 71, line 5

Consider the use of another term besides 'evaporate' in this sentence. Losses identified in the footnote associated with this sentence include groundwater subsurface outflows, which would not be considered evaporation.

Page 72, Figure 4-1

A reference for the data being shown on the chart needs to be provided. Is this figure showing total or average inches of precipitation? The location at which these data are referenced should also be included.

Page 75, line 9

To be precise, the phrase "... 20 percent reduction in statewide per capita water use ..." should be changed to "... 20 percent reduction in statewide per capita urban water use ...". The remainder of the document should be checked for consistency.

Page 75, line 14

The text states that efficient water use "...is significantly improving the reliability of the California's water supplies." Please provide some statistical evidence that the reliability of California's water supplies have been increasing in recent years. Most observers of California's water resources have argued that our water supplies are less reliable than they were 10 or 20 years ago.

The Delta and California's Water Supply

Page 75, lines 32 - 34

The draft Delta Plan states, "In-Delta use including water to the Contra Costa Canal, and Mokelumne and Hetch Hetchy Aqueducts accounts for roughly 2.1 MAF per year." For clarity purposes, the Hetch Hetchy Aqueduct does not cross the Delta and therefore reference to this aqueduct should be removed from the above sentence. The Mokelumne Aqueduct should be distinguished from the Contra Costa Canal since the former crosses the Delta, but does not contain water from the Delta itself, while the latter does not cross the Delta, but contains water directly from the Delta.

Page 77, lines 24 - 25

Consider revising the sentence as follows "Residents and businesses in or near the Delta watershed and San Francisco Bay area are most dependent on water supplied from or through the Delta ~~and its watershed~~." Residents and businesses within the Delta watershed, including the Central Valley, are entirely dependent on water supplied from the Delta watershed; Delta residents and San Francisco Bay area residents are no more dependent on water from the Delta watershed than these other communities. The San Francisco Bay area is unique in that infrastructure supplying a portion of their water crosses the Delta and the Delta communities are unique in that all of their water is directly from the Delta.

Page 77, lines 30 - 31

The text states that the "Metropolitan Water District of Southern California covers five counties ..." Technically, the service area of MWDSC covers portions of six counties: Ventura, Los Angeles, Orange, San Diego, San Bernardino, and Riverside.

Reduce Reliance on the Delta through Improved Regional Water Self-reliance

Page 80, line 12

The term 'tiered price structures' should be changed to 'increasing block water rates.' Tiered price structures include water rates which give customers a volume discount. In other words, the per unit water charge decreases as their monthly water use increases. Once fairly common in California among municipal water districts, such water rates are now rare. The Department does not encourage their use. Consider this in the remainder of the document when referring to tiered water rates.

Page 80, lines 35 - 36

The Plan states that “Through the enactment of SBX7 7, agricultural water supplies and urban water suppliers are required to identify and implement all cost-effective efficiency measures.” More accurately, Chapter 4 of SBX7-7 states:

“Agricultural water suppliers shall implement additional efficient management practices, including, but not limited to, practices to accomplish all of the following, if the measures are locally cost effective and technically feasible ...”

This distinction is quite important. Some efficient management practices might be technically feasible in some agricultural water districts, while they would not be feasible in other districts. Some water conservation measures may be cost-effective from the point-of-view of society, but not for the local water district, or local agriculture.

Page 80, Footnote 17

This citation is not accurate. There is no volume one. Also, the appropriate appendix where the information can be found should be noted.

Page 81, lines 9 - 10

The Plan states that “... water suppliers must also demonstrate their reduced reliance on water from the Delta or the Delta watershed.” The Delta Plan must consider that this may not always be the case. For example, the Glenn-Colusa Irrigation District (GCID) receives 100 percent of its water from the Delta's watershed. It would be impossible for this district to reduce its reliance on water from this watershed.

Policies

WR P1 Page 82, lines 4 - 8

This Policy states that “A covered action to export water from, transfer water through, or use water in the Delta is inconsistent with the Delta Plan if the covered action negatively impacts one or more of the coequal goals and one or more of the water suppliers that receive water from the Delta significantly causes the need for the covered action by failing to comply with one or more of the following...” As written, this long sentence is unclear. Since this important policy will become law, consider revising the language so that the intent is clear.

There are three long-term water transfers programs for which the Department is a party to. Two of these are on-going: Environmental Water Account (EWA) and the Yuba River Accord. The other, the Sacramento Valley Water Management Program

(SVWMP) is under development. The Yuba Accord and the SVWMP are also related to water rights proceedings: Decisions 1644 and 1641, respectively. The EWA was created to provide flexibility in the management of the SWP and Central Valley Project (CVP) to provide water and conditions to enhance at risk fisheries in the Delta while maintaining the water contractors whole with regards to their water allocation. This is accomplished by the direct purchase of water for environmental enhancement or the altering of the operations of the water projects which results in reduced water exports. In turn, water purchases from willing buyers make the water contractors whole with respect to their water supply. An EIR-EIS for the EWA guides the implementation of this project through 2011.

The Yuba River Accord is a negotiated settlement that implements SWRCB Water Rights Decisions 1644. Under this agreement, the Yuba County Water Agency (YCWA) revises the operation of the Yuba Project to provide higher flows in the lower Yuba River to protect and enhance fisheries and to increase downstream water supplies. To finance the increased flows, the YCWA entered into water purchase agreement with the Department for purchase and transfer of certain YCWA Yuba River releases to the Department to benefit the CVP and SWP contractors and the Environmental Water Account. The Department has pre-purchased Yuba River Accord (Component 1 – 60,000 acres per year) through 2015 with a potential extension to 2025 for the purpose of the EWA.

The SVWMP was developed as a settlement agreement for the responsibility of water rights holders to meeting 1995 Delta Water Quality Control Plan objectives. In this agreement, DWR and Reclamation agreed to continue to meet Water Rights Decision 1641 objectives and all parties would develop projects to meet water supply, water quality, and environmental standards. These projects involved Sacramento Valley entities developing and operating groundwater substitution and reservoir release projects to provide additional water to help meet local unmet demands and flows to meet Delta water quality objectives. Similar to the EWA, this project replenishes project water that is used in meeting regulatory objectives.

The terms and conditions of these agreements were carefully negotiated and agreed to by all parties. The EWA and SVWMP, in part, are designed to replenish project supplies that are used to enhance at risk fisheries and meet regulatory objectives. These agreements are complex and convoluted but necessary to reach an agreement and avoid litigation. At the heart of all three agreements is environmental enhancement. In the meaning of the Delta Plan, these projects are covered actions and must be consistent with all current laws and the policies in the Delta Plan and particularly WR P1. As such, the Delta Plan imposes additional terms and conditions to these already carefully negotiated agreements. In the event that a water transfer project under one of these agreements is found to be inconsistent with the Delta Plan, the agreement is at risk of being derailed. Consideration should be given to exempting

these agreements that are not for the primary purpose of augmenting water supplies but for environmental enhancement.

The Delta Plan must also consider pre-1914 water rights with respect to transfers. Under existing law, pre-1914 water rights are exempt from the permitting process of the SWRCB. This provides the pre-1914 water right holder the right to easily change the place of use, the point of diversion, and the purpose of use, providing CEQA is complied with if it involves a public agency. If the transfer requires the use of SWP facilities, it would also require a conveyance agreement and the considerations under Water code Section 1810(d).

The Delta Plan and particularly Policy WR P1 would place additional requirements on executing transfers involving pre-1914 water rights that may restrict the ability of the water rights holder to change place of use, point of diversion, or purpose of use. Contrary to Water Code Section 85031(a), it would appear that the Delta Plan places additional restrictions on the utilization of the pre-1914 water rights.

Moreover, as currently written, WR P1 seems to conflict with the Administrative Exemption for water transfers of one-year duration. Almost all water made available from one-year water transfers is moved from north of the Delta to south of the Delta (i.e., transferred through the Delta). So while it might have an Administrative Exemption, would it still have to comply with WR P1? If not, the Plan needs to clarify this. If compliance with WR P1 is required; it would most likely change DWR's Water Transfer Program for the foreseeable future by incurring lengthy delays due to more complexity. It would probably also require a shift in DWR resources to help facilitate water transfers if they were to still exist as a tool to ensure water supply reliability for many portions of the State.

Please note that the Department provided an addendum to our comments on the Fourth Staff Draft of the Delta Plan on 25 July 2011. Those comments on this policy still apply since the policy has not significantly changed.

Page 82, line 6

Footnote 21 should make reference to definitions in footnotes 22 and 23 (not 20 and 21.) In addition, with regards to footnote 23: Do the Delta Water Agencies (North, Central, and South) count as agricultural water suppliers?

Page 83, lines 28 - 37

In the discussion for the bullet Item for 'Evaluation of regional water balance', the intent is to meet projected demands within a hydrologic region. However, it is proposed that the regional water balance be addressed through IRWM Plans. This may be

problematic as the geographical boundaries of the IRWM Regional Water Management Groups (RWMGs) developing the IRWM Plans do not necessarily align with the hydrologic region boundaries. Requiring the RWMGs to take responsibility for bringing the entire hydrologic region into balance is likely not realistic or practical.

Policies

ER P1 Page 86, lines 6 - 14

The Delta Plan should note that the development of flow criteria is already overdue. CWC 85086 requires that the State Board develop flow criteria within nine months of enactment of the Sacramento-San Joaquin Delta Reform Act of 2009. The Delta Plan should also reference CWC 85084.5, which requires the Department of Fish and Game to develop and recommend to the State Board Delta flow criteria within 12 months of enactment of this Act.

Recommendations

WR R6 Page 90, lines 1 - 6

Completion of the Surface Water Storage Investigations recommended in WR R6 would require a significant amount of resources on the part of the Department. The Department estimates that this would require two to three additional PYs and \$5 million to \$10 million in outside contracts. This would take from three to five years to complete.

WR R7 Page 90, lines 7 - 15

This recommendation requests that the Department conduct a survey to identify projects that could be implemented in the next five to ten years. The Delta Levee Program believes that this could take an additional one-tenth to one PY of staff time.

Page 92, lines 31 - 32

The text implies the only reason DWR republished the list of eleven basins was because of the absence of current information. The limited resources available to the Department to produce Bulletin 118, Update 2003 was also a significant factor in this decision.

Page 92, Footnote 34

In the second to the last line, consider adding the word loans so it reads:
“...receiving state water grants and loans...”

Page 94, line 35

The text should include the current survey response rate along with the projected response rate of 70 percent so that the reader understands the benefits of this survey.

Problem Statement

Page 95, lines 31 – 33

The Problem Statement reads: “California does not maintain adequate uniform data about current local, regional, and state water uses and the status of its water supplies. The lack of consistent, comprehensive, and accurate information impedes California’s ability to sustainably manage the state’s water resources and improve water supply reliability.” However, the following Policy, WR P2, requires the open and transparent development of contracts involving water transfers. This policy is unrelated to the Problem Statement. The problem is the lack of adequate and uniform water use data. The policy does not resolve this issue but rather addresses an unrelated issue.

The Department recommends the DSC give consideration to the disclosure and public participation process already in place for water transfers. All water transfers that require SWP facilities, whether pre or post 1914, require CEQA compliance and all of the disclosure that is implied and public participation required. Additionally, water transfers involving post-1914 water rights, require SWRCB approval. The SWRCB posts all of their water transfer petitions on their website along with supporting documentation. The public is free to challenge the petition and call for a hearing.

The legislature, in their reform of water rights, provided for streamlining of water transfers by exempting temporary transfers from CEQA. There are efforts by USBR to streamline water transfers by undertaking multi-year water transfers, while including CEQA and NEPA compliance. Currently, there is much criticism of the burdensome nature of water transfer processing. The DSC should be careful not to make the process more burdensome. Existing mechanisms provide for adequate disclosure of impacts and opportunity to protest proposed transfers. Additional discussion is provided in the comments below.

Policies

WR P2 Page 95, lines 35 - 40

This policy states that all contracts greater than one year exporting or transferring Delta water follow established Department policies for public participation. The Department developed these policies with participants of the Monterey Amendment litigation settlement and believes that they may not be appropriate for all parties, or all export or transfer agreements. These policies, although useful in the context of

significant amendments to State Water Project water supply contracts, may make water transfers essential to California's water supply reliability more difficult to achieve due to the increased complexity of the contracting process. In addition, State law already provides opportunities for public participation independent of Department policies, and these requirements should be the foundation of the DSC's approach to providing accurate information about water transfers and exports to the public. CEQA generally applies to most agreements exporting or transferring water and the CEQA process provides significant opportunities for the dissemination of information about the contracts and for public participation. Moreover, any transfer subject to the approval of State Water Resources Control Board would have significant opportunities for public participation pursuant to State law.

The added policies will greatly intensify the oversight role of the Department. In addition, these policies, especially the public participation policy, will likely alienate northern California water agencies that have been the source of most water transfers in past years. Those agencies, and their individual farmers, already have disagreements with the Department's required role in reviewing those transfers that use SWP facilities.

This policy could also be problematic to implement. For example, some water agencies do not take their base supply from the Delta, and are thereby not covered by the Plan. But what if such an agency is in dire straits in a dry series of years and has not done any of the required planning yet needs supplies to bridge a multi-year drought? Would this agency be excluded from participating in a multi-year drought program? (A one-year transfer would be exempt.) In many cases, the Department is not a party to the purchase negotiations, and is only contacted to convey the water. Under the public participation policy, would the Department be obligated to deny the conveyance of water to a needy agency in a drought year because the negotiations between buyer and seller were not conducted in accordance with the public participation policies adopted because of the language of the Monterey settlement agreement? Would the Department need to monitor all negotiations involving cross-Delta transfers? Would the Department need to be the purchaser on all transfers and then sell the water as was done in the drought water banks and dry year programs?

One major implication of these policies and recommendation will be a decrease in multi-year long-term transfers such as the Yuba Accord in favor of more frequent one-year transfers so as to avoid the bureaucracy. In addition, the impact of the public involvement policy on the Yuba Accord renegotiations (to occur by 2015 for pricing transfer water, and again in about 2017 to address the new FERC-required flows in the Yuba River) will be to prolong the discussions and possibly result in more litigation. (Also note that the initial Accord was not challenged, either at the NEPA-CEQA level, or at the contract level.)

Recommendations

WR R5 Page 84, lines 34 – 37

Implementation of this recommendation would prove to be extremely problematic for the State Water Projects Analysis Office and the Water Transfers Program in general. The Water Transfers Program has been tasked to try and better facilitate water transfers by streamlining measures and requirements needed to evaluate proposed transfers. The Plan as proposed, would add multiple layers of complexity to the already complex water transfers process. It may even effectively remove water transfers as one the most important tools that is needed for ensuring water supply reliability.

This would be especially critical in dry year scenarios when any additional delay could jeopardize the transfer of supplemental water supplies to drought stricken areas. In addition, it could prove to greatly enhance economic impacts to both the northern and the southern parts of the state when considering that cropping decisions need to be made well in of advance of when water would be needed to grow certain crops.

WR R12 Page 96, lines 16 - 18

This recommendation states that the Department should require compliance with the policies contained in WR P1 in all SWP water contracts or agreements. WR P1 generally requires compliance with certain water supply reliability elements set forth under State law, such as the requirements for Urban Water Management Plans and Agricultural Water Supply Management Plans. The Department is supportive of efforts to promote water supply reliability. The Department will need to evaluate each one of these recommendations and its ability to include them in contracts. The enforcement mechanisms for each of these requirements are established by State law through statute for each one of these elements. The Department's ability to include these elements in contracts without express statutory authority or without the consent of the parties contracting with the Department is limited. The Department is concerned that without recognition of this limitation in the Plan, it will be difficult for our organization to complete beneficial water contracts and agreements. The Department recommends that the Plan recognize this limitation.

Administrative Performance Measures

Page 97, lines 8 - 14

These first three administrative performance measures would require the tracking and analysis of numerous tasks within water management plans by urban and

agricultural water suppliers. Would the Department be responsible for this? Who would pay for this effort and how would the information be transferred to the DSC?

Chapter 5 Restore the Delta Ecosystem

General Comment:

The Dutch Slough tidal marsh restoration and Meins Island tidal marsh restoration are specifically mentioned in the Sacramento-San Joaquin Delta Reform Act of 2009 (CWC 85085). For consistency, the Delta Plan should refer to these projects.

Page 107, lines 24 - 27

It is important to include future stressors in this list. More specifically, climate change should be added to the list of multiple stressors so that those impacts are considered when implementing restoration projects.

Ecosystem Restoration

Page 110, line 38

The term 'resilience' needs to be redefined. The Department does not concur that 'resilience' is defined by whether it provides goods and services desired by humans.

Creating a More Natural Flow Regime

General Comment:

While flow is a major environmental driver that ultimately shapes ecological processes, the landform and waterways must be consistent with the flow regimes that are being discussed or no appreciable change will occur in the ecosystem. The broad expanses of tules and grasslands do not exist anymore that could flourish and change with the seasonal changes in flows and salinities. The current Delta is a highly channelized environment and changing the flow regime will change little else except the salinity in different parts of the channels. Water will be moved faster or slower through the system, but until large scale restoration of areas that can utilize the change in flow and salinity are completed, little will be accomplished but to make large parts of the Delta brackish in the late summer and fall, much to the detriment of present agriculture practices and urban water use.

This restoration proposal to have higher flows in the winter and spring and lower flows in the summer and fall as defined in the Delta Flow objectives will not have a negative impact on salinity in Suisun Marsh in the winter, but might have a negative impact in the spring due to lower flows than that specified in Water Rights Decision (D-1641.) The additional flows will result in higher outflows in the winter for the Marsh, which equate to lower salinity since one of the factors of marsh salinity is outflow. However, the Delta Flow objectives may offset the need for D-1641 Suisun Marsh monthly standards and/or the need of Suisun Marsh Salinity Control Gates to control salinity if monthly standards are not required in the future. This could also impact existing water project agreements. This should be addressed in the Delta Plan since there could be significant consequences in the Suisun Marsh.

Controlling salinity under existing conditions has been more challenging over the years due to years of wear and tear to the Suisun Marsh Salinity Control Gates. For the past three years the gates have become less reliable in controlling salinity in the Marsh. Thus if the Delta Flow objectives are implemented, there is a potential for higher salinity in the spring/summer than under D-1641, and controlling salinity would be even more difficult.

The Plan states that the State and federal pumps cause Old and Middle rivers to flow backwards. This is not exactly the case. Unless there are very high San Joaquin River flows (around 10,000 cfs or more), the flows in Old and Middle rivers reverse naturally due to the tides. On the flood tide the flow moves upstream towards the State and federal export pumps and on the ebb tide the flow moves away from the export pumps with or without exports occurring. Exports are a contributor to what has been defined as “reverse” flow for biological opinions. Reverse flow in this case is defined as a net residual flow (or an average) upstream flow instead of downstream flow towards the ocean. For the State Water Project, much of that net residual reverse flow is caused by a reduction in ebb flow not an increase in flood flow. This is due to the operation of the Clifton Court Forebay and gates taking in water during the ebb portion of the tide. Reverse net residual flow can also occur if there are no exports. This reverse net residual flow occurs when the lower San Joaquin flows are around 1,200 cfs or less and therefore have less effect on reducing the flood tide or increasing the ebb tide.

Page 112, line 22

Flow patterns in the Delta are determined primarily by tides, river flows and water exports. Nothing is said about the pattern of waterways, sloughs and channels that are set and armored by levees that dictate where these flow patterns must travel.

Page 112, lines 36 - 37

Consider changing this sentence to read: “Altered Delta flow regimes and the highly channelized nature of the Delta are detrimental to native aquatic species and encourage nonnative aquatic species.”

Policies

ER P1 Pages 113 - 114, lines 2 - 17 and 1 - 7 respectively

ER P1 has been combined with ER R1 from the previous staff draft and requires adoption and implementation of updated flow objectives by the State Water Resources Control Board (State Board) for the Delta by June 2, 2014, and for high-priority tributaries by June 2, 2018. Establishment of these flow objectives is a highly complex issue both technically and legally and care must be taken in the development of these objectives. This appears to be a very aggressive schedule to adopt flow objectives for the Delta and also the nine priority tributaries listed. In reality, there will likely be a number of legal challenges that will extend the proposed time frame.

This policy also provides that the DSC will request an update from the State Board by June 30, 2013, on the progress towards meeting the dates provided. If these dates are not met then the Delta Plan provides options for the DSC. These options include a provision that the DSC may determine that covered actions to divert additional water from the Delta is not consistent with the Delta Plan or recommend that the State Board cease issuing Water Rights permits in the Delta. As the Department has stated previously, this leaves the water community with a great deal of uncertainty as to the ramifications of this policy, especially if legal challenges to establishing flow objectives carry on for a number of years.

The Delta Plan also should describe how this Policy will be integrated with the flow objectives of the Bay Delta Conservation Plan (BDCP.)

Improving Habitat

Page 114, lines 24 - 25

The statement is made that “Habitat loss and fragmentation ... is an important driver of worldwide species losses.” This is true. However, the introduction of non-native, invasive species is also an important driving factor. This chapter should give more attention to the impacts of non-native, invasive species upon the Delta’s environment, and what steps should be taken to reduce impacts in the future.

Policies

ER P2 Page 117, lines 21 - 28

Policy ER P2 states that habitat restoration actions must be consistent with the elevation map provided in Figure 5-2 (an 8 ½ by 11 inch sheet) based on the *Conservation Strategy for Restoration of the Sacramento-San Joaquin Delta Ecological Management Zone and the Sacramento and San Joaquin Valley Regions*. This policy is too restrictive and does not allow the DSC to make a determination of consistency independent of this map. Moreover, the scale of this map is inappropriate to base these decisions on. There are many localized areas in the Delta that are appropriate to develop smaller scale habitat projects that would not and could not be allowed under this policy as written.

As an example, the Department is investigating the possibility of developing a tidal wetland on Twitchell Island at Chevron Point. This part of Twitchell Island is at a higher elevation than the remainder of the island. Some fill material may be required to bring this area to the appropriate elevation, but it is one of the alternatives under consideration because of the high habitat value of a tidal wetland in this part of the Delta. As this policy is written, the map shows that tidal wetlands would be inappropriate at this location. The DSC needs to be able to evaluate potential projects independent of this map since the map scale is too small for decision making on a project by project basis.

This is also true for the smaller scale (a few acres) mitigation projects such as those required for the Delta Levees Program. These on-island mitigation projects would be found to be inconsistent with the Delta Plan if this policy remains as written. The Department suggests changing the language in the first sentence to: "Large-scale habitat restoration actions shall generally be consistent with the habitat type location shown on the elevation map in figure 5-2..." or alternatively: "Habitat actions shall be *guided by* the habitat type locations shown on the elevation map 5-2." This would allow the DSC to determine certain habitat projects are consistent with the Delta Plan if the project proponents can show merit and support from the wildlife agencies. Also, Shaded Riverine Aquatic (SRA), scrub – shrub, fresh water marsh and riparian forest habitats are not included in Figure 5-2 but are required for mitigation habitat types under the Delta Levees Program pursuant to AB 360. The policy as written could severely constrain construction of Delta levees (thereby increasing flood risk) and associated mitigation projects.

There is also a secondary impact associated with this policy. If habitat restoration is strictly limited to the areas provided on this map then competition for these limited available lands will increase. This will, in turn, increase costs for habitat

mitigation and restoration. For the Delta Levees Program, increased costs for mitigation will negatively impact flood risk reduction.

Figure 5-2 also contains apparent errors. For example, small communities such as Tower Park Marina Resort on Terminous are not shown as developed. An existing residential development of several hundred people in Kasson District and the legacy community of Courtland appear to be shown as a potential seasonal floodplain area. Only part of the Yolo Bypass is shown as a seasonal floodplain, while Liberty Island is not shown as flooded. The City of Stockton wastewater treatment plant ponds are shown as potential intertidal habitat.

Figure 5-2 may be better used as a guideline for determining appropriate habitat restoration actions, acknowledging inherent errors and allowing site-specific conditions, flexibility in salinity gradients, current and potential stressors, and managed wetlands to be considered. A balance of using this elevation map while identifying existing challenges such as willing sellers may be a more pragmatic approach.

ER R1 Page 119, lines 7 - 42

ER R1 proposes that the five habitat restoration projects listed (Cache Slough, Cosumnes River, Lower San Joaquin River, Suisun Marsh and Yolo Bypass projects) be prioritized and implemented. The Delta Levees Program estimates that this would take an additional 1 to 5 PYs at a cost of \$250,000 to \$2.5 million per year for the Delta levee program staff.

ER R1, Page 119, Line 20

This line should read: ... the passive restoration of Liberty Island and Little Holland Tract.

Page 120, Figure 5-3

The western Sherman Island/Chipps Island/Winters Island area and backwater sloughs along the South Mokelumne River should be included in this figure. The Department of Fish and Game's 1996 *Recovery Plan for the Sacramento San-Joaquin Delta Native Fishes* (Recovery Plan) lists Beaver, Hog, and Sycamore sloughs as spawning areas for Delta smelt (page 18) and identifies New Hope Tract, Brack Tract, and Terminous Tract as areas of potential shallow water habitat (page 140). The Recovery Plan also identifies the area between Rio Vista and Chipps Island as important native fishes habitat. These areas should be considered for inclusion in Figure 5-3. (http://ecos.fws.gov/docs/recovery_plan/961126.pdf)

ER R2 Page 120 to 121, lines 13 - 19 and 1 - 23 respectively

ER R2 also requests the Department enter into a formal agreement with the Delta Conservancy for implementation of ecosystem restoration in the Delta and Suisun Marsh and develop a plan and protocol of obtaining land. The Department anticipates that this may require between 2 and 5 PY's at a cost of \$1 million to \$5 million over the next five years plus an additional \$100,000 to \$500,000 in outside contracts.

ER R4 Page 121, lines 27 – 31

This recommendation states that “Considering the ecosystem value of remaining riparian and shaded riverine aquatic habitat along Delta levees, the USACE should work with DFG and DWR to develop and execute an agreed-upon variance process to exempt Delta levees from the USACE levee vegetation policy where appropriate.” The CVFPP under development is not specific about whether a variance process will be pursued for those levees that are part of the State Plan of Flood Control (in the Delta and elsewhere.) For Delta non-project (non-SPFC) levees, the USACE vegetation policy may not apply. For project (SPFC) levees in the Delta, the Department suggests using the following text: “The State will implement a comprehensive science-based management strategy that meets both public safety goals and protects and enhances sensitive habitats. The strategy will be built upon concepts embodied in *California's Central Valley Flood System Improvement Framework* (California Levees Roundtable, 2009) and include a system-wide risk-informed process to address the requirements of USACE national vegetation policy within the context of managing multiple levee risk factors.”

Reducing Threats and Stresses

Page 122, lines 1 - 13

Consider including sea level rise in the list of examples for Anticipated Stressors, since scientists can anticipate the impacts (i.e. rising sea levels) that will result from our present or future activities that contribute to climate change.

Page 122, Lines 19 - 20

The Plan states that “Controlling stressors in the first two categories is difficult or impossible, and management actions aimed at these stressors generally focus on adaptation and mitigation.” This statement is not quite accurate for at least one of the stressors mentioned in the second categories: introductions of nonnative species. Actions to control such species in the Delta continue. One example is the Department of Food and Agriculture's release of the leaf hopper *Megamelus scutellaris* into selected Delta waterways, in an attempt to control water hyacinth. The attempt could be

successful, which would be of great benefit to the Delta's residents and environment. The Delta Plan should support and encourage such efforts.

Chapter 6 Improve Water Quality to Protect Human Health and the Environment

General Comments:

The Delta Stewardship Council should consider recommendations for agricultural practices to reduce water quality impacts (e.g., pesticide applications, tail water management, land retirement, etc.)

Erosion from abandoned mercury mines introduces additional mercury to the Delta, but entities interested in controlling erosion at these sites may be discouraged by liability issues. The Delta Stewardship Council should consider adding recommendations to introduce laws to reduce liability of entities that engage in clean-up of these mercury mines.

Page 133, lines 13 - 15

The draft Delta Plan lists salinity, drinking water quality, and environmental water quality, as three key areas for water quality improvement. Water quality for agriculture is significant also, and should be added to this list.

Page 133, lines 29 - 35

Agricultural drainage and atmospheric deposition should be included in this list of factors that influence water quality in the Delta.

Salinity

Page 137, lines 13 - 15

The location of X2 is defined as the distance from the Golden Gate to the point where the salinity is 2 ppt *at one meter above* the bottom of the water body. This sentence should be revised to reflect that the endpoint of X2 is at one meter above the bottom of the water body, not at the bottom of the water body. (See Footnote 11 on page 10 of Revised Water Rights Decision 1641.)

(<http://www.waterrights.ca.gov/Decisions/D1641rev.pdf>.)

Drinking Water Quality

Page 140, line 33

The draft Delta Plan discusses the intake for the City of Antioch and how it is frequently out of use because of salinity intrusion. The Delta Plan should also mention the Mallard Slough intake for the Contra Costa County Water District, which is the westernmost drinking water intake in the Delta. It is also impacted by salinity, and therefore mixed with other sources of water.

Recommendations

WQ R5 Page 141, lines 22 - 25

The draft Delta Plan recommends the State Water Resources Control Board and Central Valley Regional Water Quality Control Board require all recipient regions that are supplied water from the Delta or the Delta Watershed or discharge wastewater to the Delta or the Delta watershed to participate in the Central Valley Salinity Alternatives for Long-Term Sustainability Program (CV salts). CV salts is a non-profit coalition of stakeholder groups. The Water Code does not reference this group and therefore there may be insufficient justification for recommending this requirement to water recipients or dischargers.

Environmental Water Quality

General Comment:

The discussion on pollutants and emerging pollutants should include the Suisun Marsh. Similar to the Delta, the Suisun Marsh is important to numerous species of fish, plants, and wildlife and these forms of pollutants pose some impact to the Marsh. There is only one wastewater facility near the marsh (Fairfield Treatment plant) but it doesn't discharge directly into the Marsh. However, by way of tidal influences, pollutants upstream in the Delta could affect the Marsh over the tidal cycle. The draft plan primarily focuses on the Delta, and did not mention pollutants in the Marsh. This could lead the reader to assume that pollutants are not of concern in the Marsh at this time. The recommendations at the end of this section (specifically WQ R6 through WQ R9) should include the Suisun Marsh along with the Delta.

Page 142, line 5

The units of measurement for ammonium concentrations should be corrected. Micrometers is a measurement of length.

Mercury

Page 145, Lines 22 - 24

The draft Delta Plan states, “Sources of total mercury in the Delta and Yolo Bypass include tributary inflows from upstream watersheds, atmospheric deposition, urban runoff, and municipal and industrial wastewater. More than 97 percent of identified total mercury loading to the Delta and Yolo Bypass comes from tributary inputs...” Erosion from the Suisun Bay also may be a major source of mercury to the Delta. If erosion is considered, then the mercury loading from tributary inputs is less than 97 percent. Since sedimentation/burial is considered a loss of methyl-mercury (Page 146, lines 13-14), re-suspension/erosion should be considered a gain. (Refer to <http://loer.tamug.edu/calfed/Report/Final/Foe%20-%20Final%20CALFED%20Hg%20report.pdf>.)

Selenium

Page 146, line 35

Consider removing the ‘Sacramento River’ from this sentence, as the Sacramento River does not receive selenium-laden agricultural drainage from the western San Joaquin Valley.

Recommendations

WQ R7 Page 149, lines 4 - 9

Development and implementation of a Delta Regional Monitoring Program would require a significant amount of staff time and resources from the Department as well as the other agencies named in this recommendation.

Administrative Performance Measures

Page 150, lines 1 - 2

Consider removing the administrative performance measure related to participation in CV salts. (See comment above regarding Page 141, lines 22-25)

Driver Performance Measures

Page 150, lines 15 - 17

The draft Delta Plan includes a driver performance measure that states, “Progress toward increasing inter-annual variability of salinity in Suisun Bay and Suisun Marsh. In future years, salinity will trend higher during periods of low river flow and trend lower during periods of high river flow.” This performance measure is premature and may not reflect best available science. Without the results of the State Water Resources Control Board study, it is uncertain whether increased salinity variability is beneficial to the co-equal goals. X2 requirements are intended to ensure that the 2 parts per thousand (ppt) salinity contour corresponds to habitat areas desirable for native fishes. Allowing X2 to increase, such that the 2 ppt salinity contour is further inland could result in the preferred salinity zone for some life stages of native fishes (e.g., Delta smelt) being located in an area with less desirable habitat. The State Water Quality Control Board is required to study salinity requirements and these may result in changes to variability. Moreover, this may be under the jurisdiction of the Federal Court system. The Department recommends that performance measures related to salinity requirements be deferred until the State Board study results are available.

Chapter 7 Reduce Risk to People, Property, and State Interest in the Delta

General Comments:

This chapter discusses several different types of levee standards and frequently states that these standards are not sufficient for the Plan’s objectives (Page 170, line 12 and Page 173, line 8 are examples.) However, the plan relies on these standards for establishing levels of flood protection for various land uses (see Table 7-1.) The plan should give a clear explanation of why it considers the levee standards to be insufficient and what part of these levee standards could be useful in furthering the Plan’s goals. The Plan should have a consistent message regarding the usefulness of the current levee standards, and where these standards are lacking, and a recommendation for what could be improved upon for the Plan’s objectives.

The Plan is not clear on how land uses and levee standards are correlated. The plan acknowledges that land use decisions belong to the local community (Page 181, line 29.) Consider including a discussion regarding rules and legislation which discusses zoning rights and responsibilities and how current laws could help or hinder the implementation of this Plan.

The Plan places an emphasis on dredging to maintain/increase channel capacity. The plan should note that in some areas of the Delta it is acknowledged that dredging is not an effective or efficient way to maintain/enhance channel capacity.

The Plan also emphasizes more stringent levee design standards for rural residential areas in the Delta, to provide protection for the 200-year event. This is a higher standard than what is being proposed by the Central Valley Flood Protection Plan (CVFPP) process for rural and small communities protected by State Plan of Flood Control (SPFC) levees (100-year protection is currently proposed).

Page 161, line 10

The draft Delta Plan states that the legal Delta and Suisun Marsh levees protect approximately 839,591 acres of land. It is true that the Sacramento-San Joaquin Delta and Suisun Marsh covers approximately 840,000 acres. However, it is not accurate to state that the levees protect all of this 840,000-acre area. A significant portion of this area is not protected behind levees (e.g., upland areas near Tracy and Brentwood, tens of thousands of acres of open water areas such as Grizzly Bay) while some areas outside of the legal Delta boundary may be protected by Delta levees.

Problem Statement

Page 165, lines 5 - 6

The problem statement states: "Future Delta floodways and bypasses have not been formally identified and protected" but the text that follows does not address this issue. The Plan should have a recommendation for a feasibility study to identify potential floodways and bypasses in the Delta.

Flood Risk in the Delta

Page 162, Figure 7 – 1

Figure 7 – 1 conveys a complex concept in a manner most readers will grasp and illustrates the critical variables in understanding Delta annual flood risk.

Ongoing Flood Management Efforts by Other Agencies

Page 163, lines 36 - 37

For consistency, the Period Inspection (PI) listed should be referred to as a program, not a system.

Policies and Recommendations – Floodway and Floodplain Protection

Page 164, lines 5 - 11

The FEMA floodway and the CVFP Board floodway are similar but not exactly the same. Consider including both definitions and then describing how they could each be used in the Delta.

Page 164, Figure 7-2, line 13

This figure should be entitled: *Conceptual Diagram of a Floodway within a Floodplain.*

RR R1 Page 166, lines 2 - 6

The proposal to evaluate a bypass and floodway on the San Joaquin River near Paradise Cut may be included in the Central Valley Flood Protection Plan.

Page 166, lines 40 - 42

The Plan states that “future land use decisions should not permit or encourage construction of significant numbers of new residences ...” Once urban areas in the Secondary Zone achieve a 200-year level of protection, which is what the CVFPP intends to achieve, and the economy improves, we can expect that spheres of influence would undergo new development in accordance with existing plans. This is particularly true for Tracy, Lathrop (Stewart Tract), and Stockton.

Existing Levee Standards and Guidance

Page 168, lines 21 - 22

The draft Delta Plan states that the PL 84-99 standard refers to the USACE’s Delta-specific PL 84-99 guidance. It should be noted that the Delta-specific PL 84-99 guidance is for non-federal levees only. Federal levees (i.e., project levees) in the Delta use the PL 84-99 standards. The Delta Plan should refer to both the Delta-specific PL 84-99 guidance and the regular PL 84-99 standards, since both federal and non-federal levees exist in the Delta.

Connecting Level of Flood Protection to Land Use

Page 171, Figure 7-5

This figure successfully displays the complex subject of levee classifications and land use in a manner useful to most readers.

Few Levee Standards Exist for Agriculture, Utilities, and Habitat

Page 172, line 39

The statement that the Delta is crisscrossed with pipelines conveying water from the Delta to regional users should be modified to state that the Mokelumne Aqueduct (conveying water from the Delta watershed) crosses the Delta. As a side note, the Mokelumne Aqueduct does not convey water from the Delta and no other water pipeline crosses the Delta.

Page 172, lines 41 – 42

The Plan discusses the importance of utilities in the Delta and states that there is not a defined level of flood protection. Is the DSC proposing an individual standard for utilities to be developed? If this is a case, more discussion is needed in the Plan on this topic. Also, consider including the railroads that cross the Delta in this discussion.

Policies

RR P3 Page 173, line 12

This Policy requires that all covered actions be consistent with Table 7-1; however, the descriptions in the first column of Table 7-1 describe mostly housing development. Is it the DSC's intent that all covered actions must be consistent with this table or just housing development? This should be clarified in the text. If all covered actions must meet these criteria, then the Delta Levees Program estimates that up to an additional 1 PY will be required at a cost of \$250,000 per year will be required to meet the intent of this policy.

Recommendations

RR R3 Page 173, lines 14 - 18

Recommendation RR R3 states that DSC should coordinate with the Department and the Department of Parks and Recreation to develop a plan for flood protections

related to specific land and recreation uses. The Department estimates that up to an additional PY would be needed to complete this task over the course of several years.

Flood Management Investment

Page 173, lines 35 - 36

The text states that local levees are not generally eligible for rehabilitation by the Corps. For clarity, consider adding a discussion on eligibility if the local levees meet the Delta Specific PL84-99.

Page 175, Table 7-1

Footnote (c) should include a description of the Delta specific PL 84-99 standard.

Page 177, Figure 7-6

Figure 7-6 labels many unattributed levees as non-project levees. As stated previously, there are three types of levees in the Delta: project levees, non-project levees, and unattributed levees. For future reference, a project levee is defined in California Code alternatively as a levee that is part of the State Plan of Flood Control (see Water Code 9651(d), 9110(e), 9602(c), 12646 (c); Government Code 65007 (f) and Public Resources Code 5096.805 (g)) or a federal flood control levee, as shown on page 40 of the Department of Water Resources' "Sacramento-San Joaquin Delta Atlas," dated 1993, that is a project facility under the State Water Resources Law of 1945, if not less than a majority of the acreage within the jurisdiction of the local agency that maintains the levee is within the primary zone of the delta (see Water Code 12980(f).) A non-project levee is defined in Water Code 12980(e) as a local flood control levee in the Delta that is not a project facility under the State Water Resources Law of 1945, as shown on page 38 of the Department of Water Resources' "Sacramento-San Joaquin Delta Atlas," dated 1993. All other levees in the Delta are considered unattributed levees. For example, levees along the shoreline of Clifton Court Forebay and many levees shown in the Suisun Marsh are not flood control levees and should be labeled as unattributed levees. There are also some errors on this figure. For example, there are no levees on Decker Island.

Policies

RR P4, Page 178, lines 14 - 23

Recommendation RR P4 requires completion of the Department's Framework for levee investment in the Delta by January 1, 2013. The Department concurs with this time schedule. However, the recommendation immediately following this policy adds an

additional burden to this time schedule as explained under the comments on RR R5 below.

It should also be noted that California Water Code 85306 requires the DSC, in consultation with the Central Valley Flood Protection Board, to recommend priorities for state investments in levee operation, maintenance, and improvements in the Delta (including project and non-project levees). Instead, the draft Delta Plan transfers the bulk of this requirement to the Department of Water Resources. The Delta Plan should reference CWC 85306 and note that the DSC is legally responsible for recommending these priorities.

Recommendations

RR R5 Pages 178 - 179, lines 25 - 41 and 1 - 11 respectively

The recommendations contained within RR R5 request the development of additional policies and methodologies that are not planned under our current program for the Levee Investment Framework. The development of a long-term levee policy for the Delta is not simple task. Development of this policy would likely require formal CEQA documentation. The Department estimates that this could require between 3 to 5 PYs at a cost of \$750,000 to \$1.25 million and an additional \$1.5 million to \$3 million in outside contracts. This would also add approximately two years to the schedule, pushing the completion date to 2017.

RR R6 Page 180, lines 4 - 32

This recommendation should also include a provision for the local reclamation districts in the Delta to develop their own emergency action plans and stock pile rock and flood fighting materials.

Recommendations

RR R10 Pages 182 - 183, lines 31 - 41 and 1 - 18 respectively

As the Department has previously commented, the Delta Flood Risk Management Assessment District proposed under RR R10 (as written) would have some duties that are duplicative of some programs that the Department is currently managing. In addition, there would be a significant amount of resources required to complete some of the tasks provided in this recommendation. The Department estimates that approximately 1 to 2 PYs would be required to standardize flood risk measurement data in the Delta. Costs associated with conducting levee elevation surveys and inspections every five years would cost between \$1 million to \$5 million.

Subsidence Reduction and Reversal

Page 184, Subsidence in the Delta (unlabeled figure)

Consider adding the words 'land elevation' to the note at the bottom of this figure so that it reads: "Oxidation of peat soils through the natural processes and human activities has caused the land elevation in the Delta to drop."

Recommendations

RR R11 Page 184, lines 5 - 8

This recommendation states that State agencies should not renew agricultural leases on Delta or Suisun Marsh islands unless the lessee participates in a subsidence reversal/reduction program. This recommendation has merit but has a direct cost associated with it. The Department estimates that this would require between 2 to 3 PYs per year and result in a loss of income of about \$500,000 per year on Department lands on Twitchell and Sherman islands.

Recommendations

RR R12 Page 185, lines 26 - 31

The recommended reservoir reoperation study and implementation would result in a significant amount of Department staff time, resources and money.

Chapter 8 Protect and Enhance the Unique Cultural, Recreational, Natural Resources, and Agricultural Values of the California Delta as an Evolving Place

Page 191, lines 30 - 31

The draft Delta Plan refers to the Delta as having only 57 islands. It should be noted that there are hundreds of islands in the Delta, mostly small in-channel islands without levees. In the Sacramento-San Joaquin Delta alone, there are about forty distinct islands with one or more Reclamation Districts with levees completely surrounded by waterways. There are also dozens of tracts with levees that are mostly surrounded by waterways. For clarity purposes, the draft plan should use approximations or clarify the assumptions when statements are made about the number of islands, acreage, or levee miles in the Delta.

Page 194, lines 5 - 6

The Plan states that “In the five Delta counties, agriculture supports 13,700 direct and indirect jobs and contributes more than \$4.6 billion to the economic output of California.” The Department believes that these estimates are inflated. The following is a summary of the true value of Delta agriculture, based on the Department’s spreadsheet model of Delta agriculture:

“The average annual gross value of the agricultural output of California’s Delta during the 2005 – 2009 period is estimated to be \$817.6 million, expressed in 2009 dollars. Of this amount, \$657.3 million represents the average gross value of the Delta’s crops, while the rest represents the value of animal agriculture in the Delta. These are preliminary estimates, based largely on preliminary data from DWR’s 2007 Delta Land Use Survey, as well as recent County Crop Reports for the six counties which contain the Delta. Using the standard multiplier of 3.0 that is commonly used to estimate the direct, indirect, and induced economic impacts of a basic industry such as agriculture on a modern, industrialized economy, one can infer that the total (\$817.6 million) multiplied economic impact of Delta agriculture on California’s economy would have averaged about \$2.45 billion per year (in 2009 dollars) during the 2005-to-2009 period.” (From *The Value of the Agricultural Output of the California Delta, 2005 – 2009*; DWR Draft Paper; January 26, 2011.)

Page 194, lines 39 - 41

The text should be updated to include the final *Recreation Proposal for the Sacramento-San Joaquin Delta and Suisun Marsh* just recently completed.

Page 200, lines 20 - 21

The Plan describes an Outcome Performance Measure as “Total agricultural acreage and gross revenue in the Delta will be maintained or increased in the future.” This may not be the case in the Delta. The trend in Delta agricultural acreage has been downward in recent years. And the real, inflation-adjusted value of Delta agriculture is likely to fluctuate, but generally decrease, over the next 20 years, due largely to powerful social, economic, and natural forces beyond the control of Delta residents and State or local governments.

A truly sustainable Delta is one that is allowed to change, adapt, and evolve over time. The DSC seeks to effectively manage change in the Delta, in a manner that promotes the “coequal goals” of “providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem,” in a manner that also “protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.”

The conclusion to the February 2011 report of the UC Ag Issues Center, which was presented to the Delta Stewardship Council is as follows:

“The environmental and agricultural challenges facing the Delta continue unabated. The dilemma of how to move water from Northern California to Southern California demands a long term solution that does not aggravate environmental and agricultural concerns in the Delta itself. Delta agriculture also faces implications of climate change that are as challenging as for any other region. The result is that the acreage devoted to agriculture in the Delta is likely to decline over the long term because costs to rebuild the elaborate levee system are simply too high. The result is likely to be a small but more sustainable Delta agriculture that can be a vibrant contributor to the local and statewide rural and agricultural economy.” (Evaluations of Policy Alternatives to Benefit Agriculture in the Sacramento-San Joaquin Delta of California; February 17, 2011; Daniel A. Sumner and John Thomas Rosen-Molina; University of California Agricultural Issues Center.)

Chapter 9 Finance Plan Framework to Support Coequal Goals

Guiding Principles

Page 206, lines 16 - 18

The text states that “Capital construction projects, whether for water reliability purposes or improvement in the Delta ecosystem, should be undertaken simultaneously with the development of beneficiary and user fees.” The Department believes that an agreement should be reached on how a capital project is to be financed, including how “beneficiary and user [or stressor] fees” will be determined before construction is started.

Page 206, lines 31 - 33

This bullet is not clear in its intent in specifying what activities would or would not be credited against future assessments. For example, are the ‘existing expenditures’ that would be credited against future assessments being provided by nonprofit entities or Joint Power Authorities? Would ‘site-specific expenditures’ made by agencies be treated differently?

Background

Page 206, lines 38 - 41, and Table 9-1 on page 207

The text states that entities that provide water-related services in California have expenditures in excess of \$20 billion annually. Are these expenditures related solely to those water-related services? If so, the text and the title to Table 9-1 should reflect that. The relevancy of this to the Delta Plan should also be discussed.

Page 207, line 12

The text should be amended to read: "... such as some ecosystem benefits that go beyond mitigation requirements..."

Financing Needs

Page 208, lines 4 - 14

It is important to note that, regardless of what happens with the BDCP, the Fish Restoration Program Agreement (FRPA) is still being implemented, and requires State and Federal water contractors to create habitat for delta and longfin smelt (among other actions to meet the requirements of the federal Biological Opinions). More information can be found at:

<http://www.acwa.com/news/endangered-and-invasive-species/dwr-dfg-sign-fish-restoration-agreement> .

Immediate Needs – Funding a Strong Delta Science Program

Page 208, lines 24 - 27

The plan states that funding for the Delta Science Program and Independent Science Board would require \$27 million per year. The Department recognizes the importance of the Science Program and recommends that studies funded through this program focus on studies that are directly applicable to problem solving in the Delta.

Immediate Funding Recommendation – Flood Management and Prevention

FP R3 Page 210, lines 39 - 41

This recommendation states that the Legislature should appropriate \$50 million of Proposition 1 E funds to the Department to begin acquisition of land and easements

for the proposed San Joaquin/South Delta Flood Plan. The Department estimates that this would require 1 one to 3 PYs at a cost of \$250,000 to \$750,000 to implement.

FP R3 and FP R4 Page 210, lines 34 - 41

Are the \$100million and \$50million figures contained in these two recommendations from the Propositions' language, or other legislation? If not, how were they derived? Are these figures tied to specific investments or investment priorities?

FP R4 Page 211, line 6

The text recommends that the deadline of July 1, 2013, be extended for the funding for the Department's Flood management programs in the Delta. This date may be referring to proposed sunset date for the Delta Levee's Subventions Program. The other programs mentioned will not be affected by this sunset date. Legislation will be required to extend the date for the Subventions program.

User Fees

FP R7 Page 211, lines 33 - 34

This recommendation proposes amendment of AB 3030 and SB 1938 to allow local agencies to assess fees under Proposition 218. A description of the legislation and how it relates to Proposition 218 should be provided in the text to clarify the purpose of this recommendation.

Payment in Lieu of Taxes

FP R11 Page 212, lines 4 - 6

This recommendation puts the decision for "payment in lieu of taxes" for property purchases in the Delta for public purposes with the Legislature. The Department believes that this is a positive change since the Legislature is in a better position to see the long-term effects for all public projects throughout the State.

Public Goods Charge

FP R12 Page 212, Line 10

The Plan recommends "a statewide public goods charge ... for water." The Plan should clarify if this recommendation includes groundwater and/or water obtained by riparian rights.

Prioritized Levee Investments

FP R13 Page 212, lines 20 - 26

This recommendation suggests that the Department complete a Delta-wide comparative benefit/cost analysis for levee operations, maintenance, and improvements. The Delta Protection Commission (DPC) may be better suited to accomplish this task since the DPC is charged with developing an Economic Sustainability Plan for the Delta. This Economic Sustainability Plan is integrally tied to the levee system in the Delta. Therefore, the DPC should be charged with completing this recommendation.

The Strategic Plan also recommended this analysis, but also specifically recommended a separate analysis of highway protection strategies. This could include the Department improving the protection provided by levees on islands crossed by highways, but could also include the Department of Transportation raising these highways or relocating some of the highways. Other departments with infrastructure in the Delta could be similarly involved in the comprehensive analysis. The Delta Plan should recommend that departments with infrastructure in the Delta should participate in a cost/benefit analysis of infrastructure protection strategies and should specifically note a separate analysis of highway protection strategies, as described in the Strategic Plan.

The Department has spent considerable effort in the past analyzing costs and benefits associated with determining the local reclamation districts ability to cost share in levee improvements. Establishing cost and benefits associated with the levee system in the Delta proved to be very complex. This recommendation would require a significant level of staff time and costs to complete. The Department estimates that this would require between 2 to 3 PYs at a cost of \$500,000 to \$750,000 along with outside contractor costs between \$1 million to \$5 million.